



### BOSTON and MAINE RAILROAD

North Station
BOSTON 14, MASSACHUSETTS

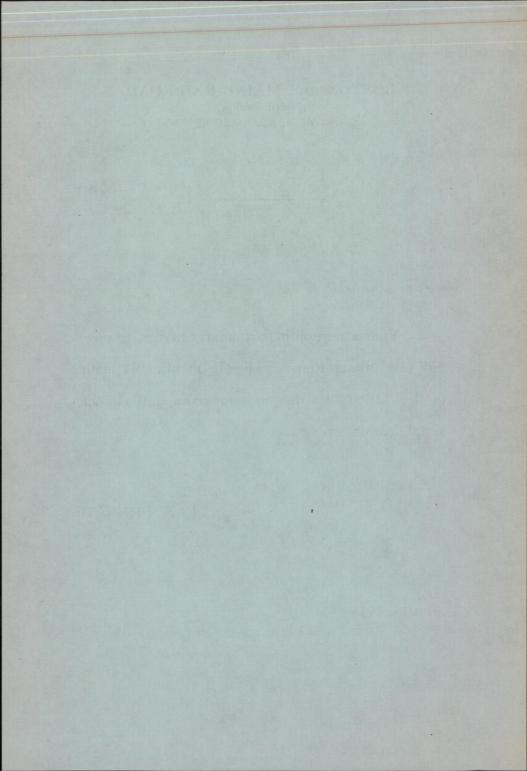
Notice to Stockholders:

Your attention is particularly invited to page 5 of the Annual Report, wherein mention is made of legislation bearing on your company's stock simplification problem.

E. S. FRENCH

President.

March 15, 1948.



# Jo the Owners of

### THE BOSTON AND MAINE RAILROAD

In the following pages you will find a summary of your company's operations and activities during the year 1947, with statements of the financial results thereof.

Your management will be happy to furnish information concerning any items that may be of special interest.

Photo: Getting ready for day's work; early morning at the Boston Engine Terminal

#### BOARD of DIRECTORS

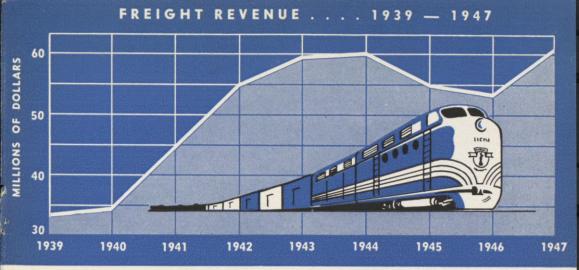
PHILIP R. ALLEN *  East Walpole, Mass.	JAMES GARFIELD Cambridge, Mass.
ROGER AMORY  Boston, Mass.	ALDUS C. HIGGINS  Worcester, Mass.
LOUIS M. ATHERTON * Swampscott, Mass.	HARVEY P. HOOD  Cambridge, Mass.
RICHARD L. BOWDITCH Cambridge, Mass.	ERNEST M. HOPKINS  Hanover, N. H.
HUGH J. CHISHOLM * Portland, Me.	AUGUSTUS P. LORING, JR.  Beverly, Mass.
T. JEFFERSON COOLIDGE  Brookline, Mass.	JOHN R. McLANE*
FAIRMAN R. DICK New York, N. Y.	Manchester, N. H. ROY L. PATRICK*
BERNARD W. DOYLE  Leominster, Mass.	Burlington, Vt. PHILLIPS M. PAYSON
HARRY H. DUDLEY  Concord, N. H.	Portland, Me.
FREDERIC C. DUMAINE, JR.* Weston, Mass.	WILLIAM B. SKELTON Lewiston, Me.
EDWARD S. FRENCH * Springfield, Vt.	J. DUNCAN UPHAM † Claremont, N. H.
* Member Executive Commi	ttee † Died Jan. 17, 1948

#### **OFFICERS**

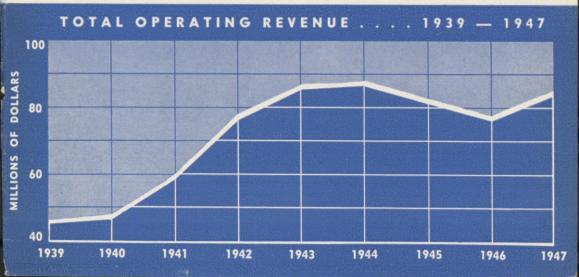
President and Chairman of Executive Committee EDWARD S. FRENCE Assistant to President
Vice President — Finance and Accounting       W. S. TROWBRIDGE         Comptroller       G. F. GLACY         Treasurer       E. J. GALLAGHER         Director of Budgets       H. F. FRITCH
Vice President — Operations J. W. SMITH General Manager F. W. ROURKE
Vice President — Purchases and Stores A. W. MUNSTER Purchasing Agent
Vice President — Traffic       J. W. RIMMER         Freight Traffic Manager       P. J. MULLANEY         Passenger Traffic Manager       C. F. PALMER
Chief Engineer T. G. SUGHRUE  Assistant Chief Engineer
General Counsel
Clerk of Corporation

#### TRANSFER AGENTS

For all classes of stock
OLD COLONY TRUST COMPANY,
45 MILK ST., BOSTON, MASS.
For common stock
GUARANTY TRUST COMPANY,
140 BROADWAY, NEW YORK CITY







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	1947	Increase or Decrease from 1946	Per Cent
Operating Revenues	\$84,277,139 65	\$7,109,989 94	9.21
Operating Expenses	66,484,620 46	2,358,297 10	3.68
Net Revenue from Operations	\$17,792,519 19	\$4,751,692 84	36.44
Railway Tax Accruals	8,271,598 51	3,184,447 87	62.60
Railway Operating Income	\$ 9,520,920 68	\$1,567,244 97	19.70
Equipment and Joint Facility Rents — Net Dr	3,590,403 11	133,702 03	3.87
Net Railway Operating Income	\$ 5,930,517 57	\$1,433,542 94	31.88
Other Income	820,085 16	d 551,059 96	40.19
Total Income	\$ 6,750,602 73	\$ 882,482 98	15.04

#### **DEDUCTIONS**

Rental Payments — Fixed	\$ 698,413	99	d \$	282,647	24	28.81
Interest on Debt—Fixed	2,733,912	90	d	39,896	38	1.44
Interest on Unfunded Debt	20,235	23		8,128	68	67.14
Other Deductions	101,809	12	d	34,685	51	25.41
Total Deductions	\$ 3,554,371	24	d \$	349,100	45	8.94
Income After Fixed Charges	\$ 3,196,231	49		1,231,583		62.69
	-					===

d Indicates decrease.

#### Income after Fixed Charges (Available Net Income)

has been allocated in accordance with Mortgage Indentures to the following purposes:

Sinking Fund for Redemption of Series RR Bonds Interest on Income Bonds Series A:		\$ 679,102	00
Unearned for period, Jan. 1 to Dec. 31, 1945 at 4½% (A)	\$1,248,583 68		
Accrued for period, Jan. 1 to Dec. 31, 1947 at $4\frac{1}{2}\%$	1,215,180 02	2,463,763	70
Sinking Fund for Redemption of Series A Bonds (B)		53,365	79
Total		\$3,196,231	49

#### NOTES:

A — Represents 1945 unearned interest on Series A Income Bonds. The Directors at their meeting on January 29, 1946, authorized the payment of 1945 interest in full @  $4\sqrt{2}\%$  on May 1, 1946, this unearned interest to be deducted from subsequent earnings. This sum credited to Profit and Loss in 1947 to off set charge to Profit and Loss in 1945.

B — Sinking Fund for Series A Income Bonds amounts annually to \$482,870. Earnings were sufficient to allocate only \$53,365.79 for this purpose.

#### **ASSETS**

#### LIABILITIES

Total investment in Transpor- tation Property less depre- ciation and amortization	\$221,674,211 87	Capital Stock and Premium	\$108,839,540 14
Investment in Affiliated Properties	7,574,754 20	Long-Term Debt	105,182,829 78
Current Assets	28,916,295 50	Current Liabilities	18,465,759 47
All other assets	10,512,772 45	Surplus	34,814,812 60 \$268,678,034 02

See also condensed balance sheet, pages 28-29

#### CAPITAL STOCK

The number of shares of Capital Stock of all classes outstanding December 31, 1947, including fully-paid negotiable receipts for subscriptions to Prior Preference Stock, was unchanged at 1,046,113 shares, of a par value of \$104,611,300.

In the 1946 Report it was stated that a Committee of the Board of Directors had been studying the development of a fair and equitable plan for the simplification of your company's capital stock structure, and had concluded that it was not possible of accomplishment under the laws as then existing. It was further stated that the best and most feasible solution lay, in the Committee's opinion, in the enactment of Federal legislation which would compel acceptance by a small minority of a plan approved by a substantial majority of the stockholders and the Interstate Commerce Commission.

As of the time this report goes to press such legislation has been passed by the Senate, and we have every expectation that it will soon become law. Therefore your Board of Directors has reactivated its Committee above mentioned, and the Committee, assisted by officers of the company, is considering various stock recapitalization plans. We hope and expect that an appropriate plan, of benefit to the company and to you, its stockholders, can be made effective under the law.

#### CHANGES IN LONG-TERM DEBT

Long-Term Debt, outstanding in hands of Public on December 31, 1947 amounted to \$99,585,829.78, a decrease of \$1,925,490.41 since December 31, 1946.

#### DECREASE IN LONG-TERM DEBT

No

Funded Debt reacquired and Cancelled: Series RR 1st Mtge. 4% Bonds

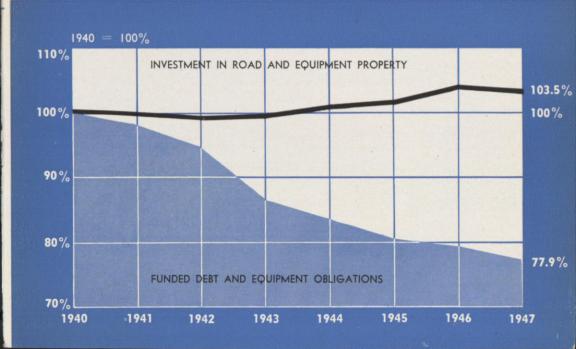
Series KK 1st Mige. 4/0 Donds		
due 7/1/60	\$ 768,200.00	
Series A Income Mtge. 4½%		
Bonds due 7/1/70	61,000.00	
Matured Funded Debt Paid Off:		
Series FF Gen. Mtge. 5% Bonds		
paid 1/1/47	52,000.00	
Series GG Gen. Mtge. 5% Bonds		Assertation of the last
paid 4/1/47	13,000.00	
Increase in Treasury Holdings of		
Bonds (not cancelled)	928,200.00	
Decrease Funded Debt in hands of		
Public		\$1,822,400.00
Decrease in Equipment Obliga-		
tions account installment pay-		
ments during the year	\$3,245,090.41	
Increase in amount of Equipment		
Obligations account new equip-		
ment received during the year .	3,142,000.00	103,090.41
Net Decrease in Long-Term Debt		A. 007 100 11
in Hands of Public		\$1,925,490.41
оте. — Of \$5,597,000.00 Long-Term Debt own	ad by the Rail.	
road, there is pledged with Old Color	ry Trust Com-	
pany, Trustee, in lieu of Mortgaged Pro	operty Sold	\$661,000.00

The chart opposite illustrates by percentage ratios based on December 31, 1940, increases and decreases by years in investment in "Road and Equipment Property" and in "Funded Debt and Equipment Obligations." During the period of 7 years, net investment in "Road and Equipment Property" increased \$8,705,769 (from \$246,125,406 to \$254,831,175) and "Funded Debt and Equipment Obligations, in Hands of the Public" decreased \$28,293,828 (from \$127,879,658 to \$99,585,830). Funded Debt decreased \$33,703,300 and Equipment Obligations increased \$5,409,472.

#### ANNUAL REPORT FOR THE YEAR 1947



The tax burden on your company in 1947 was \$8,280,598.51, equivalent to almost \$8.00 per share on each share of capital stock of all classes outstanding, and is an increase over 1946 of \$3,184,447.87. The large increase is due principally to Federal Income Taxes on our higher net income and to payroll taxes paid by the carriers to the Federal Government, namely 534% of each individual's monthly pay up to \$300 under the Railroad Retirement Act, as amended by the Crosser Act,



#### BOSTON AND MAINE RAILROAD

and 3%, similarly computed, under the Railroad Unemployment Insurance Act. These two payroll taxes alone in 1947 cost your company an average of \$265.05 per employee. In addition each employee is taxed 53/4% of the first \$300. of his monthly pay under the Railroad Retirement Act but does not contribute under the Railroad Unemployment Insurance Act.

Exclusive of the taxes paid directly by the Railroad, your company, acting as an agency for the Federal Government, collected from others or withheld from its employees a total of \$11,320,784.06, consisting of transportation taxes on persons and property, employees' withholding (income) taxes and the 534% assessed against the employees under the Railroad Retirement Act.



Vertical Turret Lathe, Billerica Shop, Automatically Bores and Faces Car and Locomotive Wheels

#### RETURN ON INVESTMENT

In 1947, for the second successive year, your company moved a greater volume of freight than in any peacetime year in its history prior to 1946. Both gross ton miles and net ton miles were but 1% under 1946, when the previous high for a peacetime year (1929) was exceeded by 7.6%.

Despite this relatively large volume of business the Return on Investment in 1947 was only 2.3%, as shown below:

Gross Revenues	\$ 84,277,140 66,484,621	\$ 77,167,149 64,126,323		\$ 46,341,082 33,133,913	% Change to 1947 81.9 100.7
Net Revenue	\$ 17,792,519	\$ 13,040,826	36.4	\$ 13,207,169	34.7
Railway Tax Accruals Equipment Rents Joint Facility Rents	\$ 8,271,599 - 3,295,411 294,992		3.4	\$ 3,519,723 2,548,171 184,133	135.0 29.3 60.2
Deduction from Net Revenue	\$ 11,862,002	\$ 8,543,852	38.8	\$ 6,252,027	89.7
Net Railway Operating Income(A) Investment in Transportation	\$ 5,930,517	\$ 4,496,974	31.9	\$ 6,955,142	d 14.7
Property including Cash and Material and Supplies, less Recorded Depreciation and Amortization (System) (B)	\$254,644,131	\$250,506,57	1 1.7	\$253,336,974	0.5
Rate of Return (See Note)	2.3%	1.8%		2.7%	
NOTE TO A TO					

NOTE: The Rate of Return is the percentage of A to B. d Decrease

The failure of operating results to reflect a gain in Return on Investment comparable with increased revenues is due almost entirely to the time lag between the rise in operating costs and the granting of authority to increase freight and passenger rates. For instance, straight time earnings, plus payroll taxes, for all classes of this company's employees steadily increased until today they are 76% above 1939, while materials and supplies during the same period have advanced approximately 78%. On the other hand, not until recently were the railroads permitted to increase rates, and then not in proportion to increased operating costs.



Freight revenue for the year was \$61,259,600.94, 13.9% above 1946 and the highest in Boston and Maine history. Revenue tons of freight handled were 23,892,658, 1.2% above 1946. The average revenue per net ton was \$2.56, 12.3% above 1946 and another all-time high.

Although there was considerable change in the character of our traffic the total volume handled was almost the same as in the preceding year. That our freight revenue reached an all-time high was due to the general increase in freight rates which became effective on January 1, 1947, and the later emergency charge which increased our revenue during the last two and a half months of the year.

All-rail coal showed a decline of about 8% from the previous year. All-rail bituminous coal moved at about last year's level but anthracite declined, due partly to difficulties in car supply. A shortage of tank cars also affected the movement of petroleum products from ports to the interior, causing a decline from the previous year which became more rapid as the year progressed. The movement of general consumer goods continued strong, though a nationwide shortage of box cars resulted in some loss of traffic.

On January 1, 1947 the permanent increases in freight rates and charges allowed by the Interstate Commerce Commission in Ex Parte 162–148 became effective and increased the freight rate level approximately 17½% above the level that existed immediately prior to July 1, 1946, when the temporary increase, averaging for this company about 7½%, went into effect. On July 3, 1947 the railroads of the country petitioned the Commission for additional increases which, in our territory, were based on a general increase of 28%, with exceptions on some commodities, and which were expected to yield this company an average increase in revenue of about 18%. On September 5, because of the general Wage Award to the non-operating groups, effective September 1, the carriers petitioned for further increases and on December 3, as a result of the actual and anticipated awards to the operating groups, an additional amount was sought to make the total base increase in our

#### HOW OUR FREIGHT TRAFFIC HAS MOVED 1939-1947 11.51 AGRICULTURE OF THOUSANDS ANIMALS 3.55 FREIGH 27.05 MINES TONS IN HUNDREDS O **FORESTS** PERCEN 45.12 MANUFACTURES AND MISCELLANEOUS 4.04

area 41%, which, on account of the exceptions on certain commodities, was expected to yield an increase of about 30% in freight revenue. These petitions are still before the Interstate Commerce Commission under Ex Parte 166, but effective October 13, 1947, the Commission granted the carriers a temporary increase of 10% in the form of an emergency charge, the only exceptions being on coal, coke and iron ore, on which specific increases less than 10% were permitted. At the end of the year the Commission allowed the carriers to increase this emergency charge to 20%, with similar exceptions on coal, coke and some kinds of ore, and the increase went into effect on January 5, 1948. All of the State Commissions in our territory have permitted both of these increases on intrastate traffic.

The adjustment of class rates ordered by the Interstate Commerce Commission in the spring of 1945 in Docket 28300, but stayed by Court order, was upheld by the Supreme Court and went into effect on August 22, 1947. To your company the revenue effect of the adjustment is slight as it applies on only a small percentage of our traffic.

During the year the United States Department of Justice filed a number of formal complaints with the Interstate Commerce Commission, alleging that the railroads had made unreasonable charges for the transportation of various supplies and materials of war during the recent conflict. Collectively the amounts sought from the railroads are enormous, and your company is involved to a considerable extent, particularly with the charges on ammunition and explosives, and on transit shipments, which we handled in substantial quantities. We are participating with the other carriers in vigorously defending the charges collected.

#### INDUSTRIAL DEPARTMENT

Industrial development in the territory served by your company continued at a high level throughout 1947. Ninety-eight new industries, with traffic estimated at 26,000 cars per year were established on the company's lines during the year. Forty new plants, or additions to existing plants, were under construction during the year, with new floor space of approximately 2,000,000 square feet. Plans were made by various industries for the construction of 27 new plants in Boston and Maine territory in 1948. There were 29 sales of Railroad-owned land for industrial purposes, involving over 1,500,000 square feet, and new private sidetrack installations, totaling 21,874 feet of track, were completed or authorized.



Passenger revenue for the year was \$15,225,632.77, a decline of 9.1% from 1946. The number of passengers carried declined from 29,414,024 in 1946 to 26,318,719 in 1947, or 10.5%. There was a continuing though anticipated decline in general passenger traffic, augmented by the fact that there was almost no movement of discharged or furloughed servicemen, which alone contributed almost a million dollars to our passenger revenue in 1946.

On June 1, 1947 the basic coach fare was increased from 2.2¢ to 2.5¢ per mile and the first class fare, charged in parlor and sleeping cars, was increased from 3.3¢ to 3.5¢ per mile. During the five months of 1947 prior to the increase, the revenue from these classes of traffic declined 8.9% and the number of passengers declined 13.4% as compared with the previous year. During the five months subsequent to the increase the corresponding revenue decline was 5.1% and in the number of passengers 17.4%, indicating that while the increase tended to discourage rail travel to some extent, it improved the revenue.

On October 27, 1947, a general increase was made in our commutation rates, varying from 25% in the 60 ride and monthly pupils' tickets to 15% in the new 46 ride monthly ticket which the Railroad was ordered to provide in recognition of the more general 5-day working week, and in the case of the 5 and 12 ride tickets generally used for the shorter distances the increase was 20%. There has been no indication that these new rates have adversely affected commuter traffic, which showed an increase over the preceding year for the sixth consecutive time.

The purchase of eight new streamlined coaches, two combination baggage cars and two restaurant-lounge cars by your company, and a similar purchase of identical cars by the Maine Central, made it possible to supply most of the trains between Boston and Bangor with some of this modern equipment, beginning early in the summer. The public response to this improvement has been gratifying.

No important changes were made in train schedules except in some of the summer services. The BAR HARBOR between Washington and Ellsworth was operated three days a week in each direction as compared with six days a week in 1946, and the EAST WIND, operated in 1946 between Washington and Rockland, ran in 1947 only between New York and Portland. Our week-end summer service from Boston to the Maritime Provinces was improved by the addition of through sleeping cars and coaches operating on the PINE TREE Friday nights from Boston to Bangor and reaching Saint John, N. B. early Saturday morning to connect with the Canadian Pacific boat for Digby, N. S. and Canadian National trains east from Saint John. This proved extremely popular. The sleeping car service between New York City and points in the Upper Connecticut Valley was also improved.

In coordination with other rail carriers and under arrangements made by the Association of American Railroads, we handled the "Freedom Train" over a large part of our system during the fall. The train was displayed at many points on our line and attracted large numbers of people, particularly school children.



New Wheel-turning Lathe at Billerica Shops

#### MILK TRAFFIC

Milk revenue was \$1,259,086.04, an increase of 4.5% over 1946 although the volume handled declined 2.9%. The reduction in volume was caused by lower consumption rather than by diversion of traffic away from the rails.

The increase in revenue was the result of increased rates authorized by the Interstate Commerce Commission. On January 1, 1947, in its permanent order in Ex Parte 162–148, the Commission authorized an increase of 15% over the rates in effect prior to July 1, 1946 when its temporary order permitted an increase of 8%. On October 13, 1947 a 10% interim emergency increase authorized by the Commission went into effect, and this was increased to 20% effective January 5, 1948.

#### **EXPRESS TRAFFIC**

Revenue from express traffic increased from \$286,288.11 in 1946 to \$1,089,053.66 in 1947.

As the railroad's revenue from this source depends upon the excess of the Railway Express Agency's revenue over its expenses, any increase or reduction in the Agency's net revenue is quickly reflected in its payments to the railroads.

The improvement during 1947 was the result of the rate adjustment of December 13, 1946 which increased the rates an average of about 17 ½%, and another increase effective October 25, 1947 of approximately 36%. A further increase has been sought, and temporary authority was granted to increase the first and second class rates 10% effective January 22, 1948. There has been a noticeable diversion of the small package express business to parcel post but it is doubtful if this has adversely affected the Express Agency's net revenue.

# PURCHASE BY RAILROADS OF THE PULLMAN COMPANY

In 1947 the sale to a number of railroads of the capital stock of The Pullman Company by Pullman, Incorporated was consummated. It had been delayed for over a year and a half by an appeal to the Supreme Court of the United States by parties opposing the transaction, but that Court finally affirmed the decree permitting the sale. Approximately fifty railroads, of which the Boston and Maine is one, now own all of the capital stock of The Pullman Company, which owns a majority of and operates all the sleeping cars in the country. With the authorization of

the Interstate Commerce Commission the operations of that company will be continued for a time in the same manner as in the past, but the plan contemplates the eventual reduction of the company to an agency to supply cars from a pool to railroads having need of extra equipment, and to service and maintain such railroad-owned sleeping and parlor cars as the individual roads may desire. The future method of operation of sleeping car service by your company is under active study at the present time.

#### PER DIEM DEVELOPMENTS IN 1947

The amount of rent to be paid by a railroad for the use of another road's freight cars, customarily called a per diem payment, is a matter of great importance to your company since, by the nature of its operations, it ordinarily has many more freight cars on its line than it owns, and is therefore a debit road with respect to per diem. The rate of payment was \$1. per car per day for many years until February 1, 1945 when it was changed to \$1.15. During 1947 the rate was twice further changed, both times by vote of the owners of a great majority of the freight cars in the country. Such rate became \$1.25 on June 1 and \$1.50 on September 1.

Although the rate of per diem payments has always been fixed by agreement in the past, the Interstate Commerce Commission has jurisdiction to determine, on complaint of a railroad, just compensation for the use of freight cars. Accordingly, a number of short lines filed such a complaint, asserting the rate was higher than could be justified and asking the Commission to fix a reasonable rate. Believing the successive rates mentioned above were and are greater than the per diem cost of owning a freight car, the Boston and Maine, as well as certain other Class I railroads, intervened and actively participated in the proceeding on the side of the short lines. Six western railroads filed a similar complaint with the Commission, asserting the present rate is not high enough. These two complaints were consolidated and hearings were held in June, 1947, November 1947 and January 1948. Briefs and oral arguments will follow and a decision by the Commission is expected during the present year.

In addition to these proceedings, the Interstate Commerce Commission undertook an investigation of its own for the purpose of determining whether or not a higher per diem rate would bring about the faster movement of freight cars and a consequent easing of the car

#### ANNUAL REPORT FOR THE YEAR 1947

shortage. This investigation resulted in a decision by the Commission ordering into effect for six months commencing October 1, 1947 a per diem rate of \$2., not because this was found to be the proper rate on a cost basis, but to act as an incentive to faster car-handling. A number of railroads, including your company, attacked this order in the United States District Court for the District of Columbia, and that court enjoined the order on the grounds it was beyond the Commission's powers. As a result the \$2. rate was never effective and your company was saved a substantial amount of additional expense.

#### MAIL PAY INCREASE

In its Order of December 4, 1947, the Interstate Commerce Commission granted a 25% increase in the revenue accrued to the railroads for carrying the mail for the period from February 19, 1947, to January 31, 1948, and as of February 1, 1948, the Order authorized a 25% interim increase in individual rates of mail pay to remain in effect until further Order of the Commission.

During 1947 there was a sizeable increase over 1946 in the volume of mail handled by your company, due in substantial measure to the increase in express rates, which had a tendency to transfer to mail service some of the traffic formerly handled by the Railway Express Agency.



Taking on sand at Boston Terminal

#### **ACQUISITIONS AND ABANDONMENTS**

The purchase by your company of the physical properties and franchises of the Pemigewasset Valley Railroad, which was authorized by the Interstate Commerce Commission in the last days of 1946, was completed in 1947, thus reducing the rental payments by your company for leased lines and further simplifying the corporate structure of the Boston and Maine System.

For some years your company has been operating from East Deerfield to Turners Falls, Massachusetts, in common with the New York, New Haven & Hartford Railroad Company over a line owned by the latter company. The Turners Falls Branch of the Vermont & Massachusetts Railroad Company, which company is leased to the Boston and Maine, has been out of operation for several years due to severe flood damage to the bridge by which the line crosses the Connecticut River. With the approval of the Interstate Commerce Commission your company purchased the New Haven's line for the account of the Vermont and Massachusetts, and as a consequence, the Boston and Maine now carries all of the rail traffic to and from Turners Falls. The Interstate Commerce Commission at the same time authorized the abandonment of the old branch, there being no need for it since it parallels the line purchased. This authorization by the Commission gives assurance that there will never be the necessity of restoring the demolished bridge which would have been an expensive undertaking.

#### **OPERATING RESULTS**

The volume of freight traffic in the year 1947, as measured by Gross Ton Miles, was within 1.0% of the corresponding figure for the year 1946, the all-time high for any peacetime year in the history of the Railroad. Gross Ton Miles per Train Hour were not as high as the peak performances of the war years, when the volume of traffic was much higher, but reached an average of 34,393 or 1.1% above the average of 34,035 for 1946. This performance is the combined result of both Diesel and Steam operation, Diesel locomotives operating 59.5% of total freight train miles and accounting for 81.3% of total Gross Ton Miles in 1947.

Net Ton Miles per Car Day, the measure of efficiency of freight car utilization, also remained under the wartime peaks, as was to be expected. However, at an average of 844 it was 10.2% higher than the figure of 766 in 1946, despite severe freight car shortages and mandatory orders by governmental agencies and the Car Service Division of the

Association of American Railroads, compelling the sending of empty freight cars off our lines to other sections of the country and making it difficult to meet the normal requirements of our local industries. To state it another way, the 1947 freight volume was handled with 10.3% fewer freight cars than in 1946.

Fuel consumption in Diesel freight service remained at 1.5 gallons per 1000 Gross Ton Miles, the same as in 1946, and in Diesel passenger service fuel consumption was likewise the same as in 1946, or 0.27 gallons per Passenger Train Car Mile.

The year 1947 was the first full year of Diesel passenger locomotive operation when 2,419,494 Diesel locomotive miles were operated as compared with 1,191,298 such miles in 1946, resulting in a substantial reduction in the more expensive steam locomotive miles. Nearly all through passenger trains on this Railroad are now operated with Diesel power. Through an Operating Agreement with the Maine Central Railroad some of your company's Diesel locomotives operate over the lines of the Maine Central between Portland and Bangor, while Maine Central Diesels operate an equal number of miles over the lines of the Boston and Maine. This results in economy of operations and better utilization of locomotives for both companies. Other important main line trains between Boston and White River Junction, Vt., Boston and Troy, N. Y., and between Springfield, Mass., and White River Junction, Vt., are also operated with Diesel power.

Certain of our Diesel freight locomotives are equipped with boilers to furnish steam heat, thus making them available for heavy passenger train operations whenever the requirements of the respective services warrant.

### CHANGES IN EQUIPMENT

Steam locomotive ownership at the end of 1947 was 333. During the year 44 were sold or retired.

Diesel power ownership remained at 102 units. Diesel power on order is as follows:

4 — 2000 H. P. Road passenger units

2 — 3000 H. P. Road freight units

1 — 1500 H. P. Road Switcher

4 — 660 H. P. Switchers

1 — 44-ton Switcher

It is expected that most of these Diesels on order will be delivered in 1948 and delivery will make possible complete dieselization of through service, both passenger and freight, west of Greenfield and between Springfield and White River Junction.

Revenue freight car ownership at the end of 1947 was 6154. During the year 500 50-ton capacity steel box cars were received.

Deductions during 1947 were 413 cars retired on account of age and condition, 15 cars accidentally destroyed on foreign lines, 12 cars sold and 71 cars converted to non-revenue service.

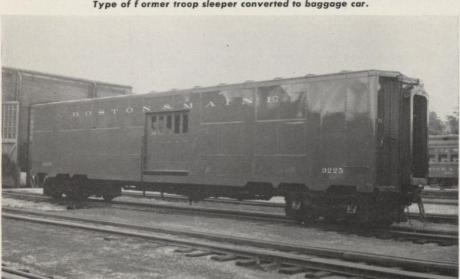
The application of A.B. brakes ordered by the Interstate Commerce Commission continued and 5419 cars, or 88.5% of ownership, are now equipped. The balance of interchange cars, 705, will be equipped as they are returned to our line. Under the Interstate Commerce Commission order all interchange cars must be equipped with A.B. brakes before January 1, 1949.

Ownership of passenger train cars on December 31, 1947, was 1222. Additions during the year were 12 stainless steel de luxe cars, 10 combines, and 45 troop sleepers, the latter acquired for conversion to baggage cars.

Sixteen steel underframe cars were retired because of age and condition, 15 cars were converted for non-revenue service, one destroyed by fire, and one sold. Four gas-electric motor cars purchased in 1926 were retired.

In addition, 33 cars built prior to 1911 have been set aside for retirement or conversion, and approximately 130 others will be taken out of service as they become due for heavy repairs.

Additions to non-revenue equipment during the year were 2 Gas Cranes purchased and 87 cars converted from passenger and freight equipment. Fifty-two cars were retired because of age and condition.



Type of f ormer troop sleeper converted to baggage car.



On March 25, 1947 all Class I Railroads were served with nation-wide demands by 17 non-operating railroad labor organizations for a wage increase of 20¢ an hour to be effective April 25, 1947. After many conferences between representatives of the carriers and representatives of the unions, as a result of which the demands were refused, the dispute was referred to the National Mediation Board. In the mediation proceedings your company was represented by a committee appointed to represent all the Eastern carriers and to work with similar committees from other sections of the country.

The mediation efforts also failed, whereupon both sides agreed to submit the dispute to an Arbitration Board, consisting of 2 representatives of the carriers, 2 representatives of the unions and 2 representatives of the public, the decision of a majority of the Board to be final.

Arbitration proceedings commenced on August 4, 1947 and continued until September 2, when a majority of the Board, the two carriers' representatives dissenting, made its award, granting an increase of 15 ½¢ an hour effective from September 1, 1947. This increase was immediately put into effect by your company and it is estimated will result in an annual increase in wage costs for that particular group of about \$5,269,000 including payroll tax.

Meanwhile, on June 20, 1947, 5 operating unions, those concerned with train and engine operations, renewed the demands of the previous year for changes in 44 rules covering working conditions. It was the denial of these 44 rule changes which precipitated the 1946 nation-wide railroad strike. At the same time your company and other carriers served notice of their intention to change 24 rules.

In addition to the rule changes demanded, these 5 operating unions, on September 30, served notice of a demand for a 30% increase in wages with a minimum increase of \$3.00 per day.

None of the carriers were able to reach an agreement with their local committees and the demands were referred to a Conference Committee for further negotiation with union officials. On November 14 the

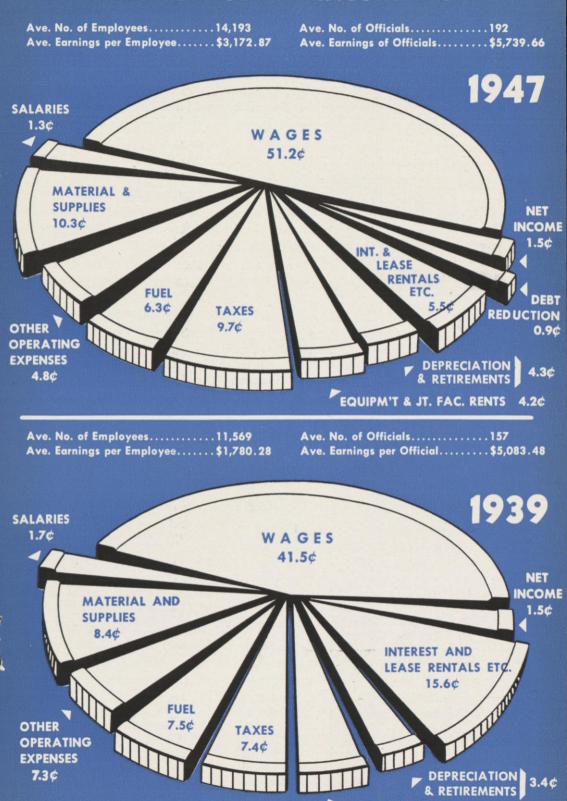
Order of Railway Conductors and the Brotherhood of Railroad Trainmen reached an agreement with the carriers on the basis of an increase of 15 ½¢ an hour, the same as was granted to the non-operating unions, retroactive to November 1, 1947. It is estimated that for this group our annual increase in payrolls, including payroll tax, will be \$977,294. Also an agreement was reached with those 2 unions in which 8 of the 44 rule changes demanded by the unions were granted and 5 rule changes demanded by the carriers were referred back to the individual roads for further negotiation with local committees. The balance of the rule changes demanded by both sides were withdrawn.

The Brotherhood of Locomotive Engineers, the Brotherhood of Locomotive Firemen and Enginemen and the Switchmen's Union of North America would not accept the 15½¢ per hour increase and demanded more. Neither would they accept the rule changes agreed to between the other two operating unions and the carriers, although members of the Brotherhood of Locomotive Engineers and Brotherhood of Locomotive Firemen and Enginemen are predominantly among the highest paid of all railroad labor. The Switchmen's Union of North America represents only about 7% of all railroad switchmen, the remainder being represented by the Brotherhood of Railroad Trainmen which had already accepted the 15½¢ award. The switchmen on the Boston and Maine are represented by this latter union.

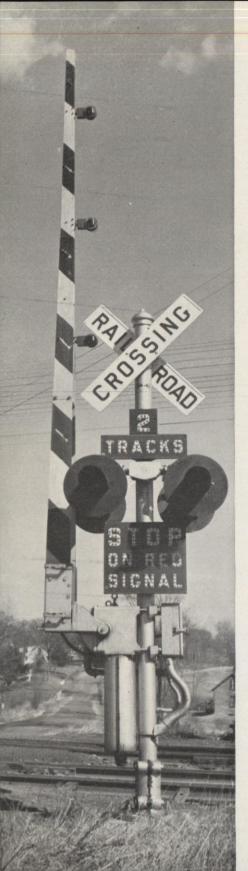
The carriers immediately invoked the services of the National Mediation Board, and when it became apparent that no agreement could be reached through mediation, the carriers agreed to submit the dispute to a Board of Arbitration. During the mediation proceedings the 3 dissenting unions had called for a strike vote of their memberships and after refusing to arbitrate announced that a strike would be called effective February 1, 1948. The Chairman of the Mediation Board thereupon announced he would advise the President of the United States that an emergency existed.

On January 30th the President of the United States appointed a Fact Finding Board, the effect of which will be to avert a strike for a period of 60 days at least. The Fact Finding Board started hearings in Chicago early in February, after which it will make its recommendations to the President. Although its recommendations are not mandatory, the theory is that the force of public opinion will compel settlement on the basis of the recommendations.

### DISTRIBUTION OF THE INCOME DOLLAR



EQUIPM'T & JT. FAC. RENTS 5.7¢



#### **ADDITIONS AND BETTERMENTS**

Approximately 2500 tons of new 112 lb. rail were laid during the year on the Fitchburg and New Hampshire Divisions; 41.6 track miles of existing stone ballast were resurfaced on the Fitchburg and Portland Divisions; 232 track miles of existing stone ballast were machine cleaned, and 1221 track miles of main lines and important branches were inspected for hidden rail defects by means of a rail detector car. Riprap totaling 4700 tons was placed during the year for embankment protection.

One steel track bridge and one part steel and part wood trestle were rebuilt while one stone arch track bridge was reinforced. On three track bridges walkways were installed to protect trainmen, and additional fire protection was installed on one track bridge. Two steel bridges were retired and openings filled, one over an abandoned railroad right-of-way and one over a closed highway. Two overhead highway bridges were rebuilt, and one new steel and concrete highway bridge was constructed by the Maine Turnpike Authority over the main line of the Portland Division near Wells Beach, Maine.

An extensive program for the installation of modern automatic flashers and combination of flashers and automatic half gates for crossing protection was begun during the year with the approval of State authorities, twenty-six such projects having been completed despite difficulty in obtaining necessary material. This pro-

One of many latest type Automatic Flasher Signals and Half-Gates installed at a number of grade crossings on the Boston and Maine.

gram will be continued in 1948, as this form of crossing protection has proved to be more economical and more satisfactory from a safety standpoint than manual protection in many locations. One grade crossing was eliminated by closing at Newton Jct., N. H., and two crossings were reclassified from private to public, one at Lakeport, N. H., and one at the Littleton, N. H., airport.

A modern centralized traffic control signal system, with necessary track changes, permitting the retirement of three less modern signal towers and two interlocking plants, was partly completed during the year. When fully completed in 1948 this project, centering at Lowell, Mass., will control train and engine movements over 27 miles of road.

The program of installing color light signals, respaced for more adequate braking distances, and replacing old style semaphore signals, was continued in 1947; four modern car retarders at the Boston Hump Yards replaced six old type retarders; at Mechanicville, N. Y., two-way radio communication between the Yardmaster's office and five Diesel switchers was put into service; and a program of installing reflector buttons on all roadway signs on the Fitchburg Division main line was completed from Boston, Mass., as far as Hoosick, N. Y. At Portsmouth, N. H., extensive yard track changes improved operating conditions and permitted the discontinuance of Newburyport, Mass., as

Type of modern Color Light Interlocking Signal rapidly

replacing old type semaphore signals on the Boston and Maine.

an engine terminal. At other yards on the system additional tracks were installed and others extended.

At Somerville, Mass., construction of a new modern Diesel shop was completed and placed in operation early in 1948. Numerous improvements were made in various other buildings of all types; flange oilers, switch heaters, flood lights and many other improvements too numerous to mention were installed at various points, all adding to the efficiency and economy of operations.

The practice of retiring unused buildings, structures and sidetracks was continued throughout the year to save maintenance and obtain the benefit of salvaged timber, steel and other materials.

Approximately 12,500 cu. yds. of filling material were placed in Boston Terminal areas.

#### MATERIALS AND SUPPLIES

The total cost of all materials and supplies purchased during the year, including fuel oil and locomotive coal but excluding equipment purchases, was \$13,831,457. as compared with \$12,575,495 in 1946. The procurement of practically all supplies proved difficult. Though the production of bituminous coal was great, so was the demand, and our inability to procure the better quality coal and to build up a reasonable stock for winter use was due to a continuous shortage of coal cars at the mines throughout the year. Fuel oil was in short supply and difficult to obtain.

The tonnage of locomotive coal purchased was 494,000 net tons at an average cost f.o.b. line of road of \$6.634 per net ton, as against 583,000 net tons and an average line-of-road price of \$6.02 per net ton in 1946. Purchases of fuel oil totalled 19,533,348 gallons at an average price of 7.57¢ per gallon, as compared with 14,699,773 gallons purchased at an average price of 6.33¢ per gallon in 1946.

The average weighted increase in the price of all materials and supplies as of December 31, 1947 was 10.2% above the December 31, 1946 level, and 69.6% above the June 1, 1941 level.

#### SALE OF HOOSAC DOCKS PROPERTY

During the latter part of 1946 negotiations were begun with the Commonwealth of Massachusetts, acting through the Port of Boston Authority, for the sale to the Commonwealth of your company's Hoosac Docks property in the Charlestown District of Boston, as part of a general program by the Commonwealth for the improvement of Boston's

#### ANNUAL REPORT FOR THE YEAR 1947

waterfront facilities. Papers were finally passed in May 1947 by which we conveyed to the Commonwealth about 14.72 acres of land with the buildings, structures and sidetracks thereon, but not including the Hoosac Grain Elevator or Grain Galleries. It is the purpose of the Commonwealth, acting through the Port Authority, to construct modern pier facilities at this location, which the Railroad has agreed to lease and operate. Negotiations are also proceeding for the sale to the Commonwealth of the Hoosac Grain Elevator property, and the subsequent lease of that property by the Railroad after extensive improvements in that facility have been completed by the Commonwealth.

Mr. James Duncan Upham, of Claremont, New Hampshire, the senior member of your Board of Directors, both in age and in years of service, having served continuously from October 8, 1913, died on January 17, 1948.

One of New Hampshire's outstanding citizens, and a leading business man of that State for many years, his passing is keenly felt and greatly regretted by his associates on the Board.

Your Board of Directors takes pleasure and pride in gratefully acknowledging the fine cooperation of its customers, both freight and passenger, as well as the loyalty and efficiency of its officers and employees throughout the year.

For the Board of Directors

Boston, Massachusetts, March 15, 1948.

President

DOAD AND BOWENING	Dec. 31, 1947	Dec. 31, 1946
ROAD AND EQUIPMENT	************	0101 (02 106 72
Investment in Road	\$186,030,616 82	\$184,603,196 73
Investment in Equipment	60,944,943 89	61,386,483 37
Threstment in Equipment		
	9246 075 560 71	\$245,989,680 10
Total	\$246,975,560 71	\$243,969,060 10
T T I D	13,381,496 85	13,942,729 69
Improvements on Leased Property	F FOF 000 01	1005010 05
Acquisition Adjustment		c 4,935,917 35
Donations and Grants	c 72,923 61	c 69,997 60
Total Investment in Transportation Property	\$254,758,250 91	\$254,926,494 !84
Total Investment in Transportation Troporty.		
A ID . '.t' - Band and Fouinment	c 22,405,134 11	c 23,464,172 14
Accrued Depreciation — Road and Equipment	c 22,400,104 11	C 20,404,112 14
Accrued Amortization of Defense Projects — Road	10.000.001.00	10 659 109 05
and Equipment	c 10,678,904.93	c 10,653,192 05
Investment in Transportation Property less Re-		
corded Depreciation and Amortization	\$221,674,211 87	\$220,809,130 65
borded Depression and		
Sinking Funds	3,255 25	3,114 79
Sinking Funds	1,341,568 88	919,344 27
Capital and Other Reserve Funds		403,288 80
Miscellaneous Physical Property	414,651 76	
Investments in Affiliated Companies	7,574,754 20	7,514,620 85
Other Investments	18,208 37	22,452 28
other my comments		
m . 1 7	\$231,026,650 33	\$229,671,951 64
Total Investments	\$231,020,030 00	φ229,011,001 01
CURRENT ASSETS		
Cash	\$ 9,254,860 99	\$ 6,710,489 94
Cash	944,709 30	745,044 85
Cash in Transit — Agents Remittances	6.015.000 00	6,115,000 00
Temporary Cash Investments	1,343,963 60	2,114,472 99
Special Deposits		
Loans and Bills Receivable	92,655 00	11,000 00
Net Balance Receivable from Agents and Conductors	2,078,872 17	2,064,329 89
Miscellaneous Accounts Receivable	2,977,999 82	3,088,095 20
Material and Supplies	5,266,174 99	4,885,437 39
Material and Supplies	84,093 89	136,902 23
Interest and Dividends Receivable	677,610 15	449,453 10
Accrued Accounts Receivable		
Other Current Assets	180,355 59	45,010 69
Total Current Assets	\$ 28,916,295 50	\$ 26,365,236 28
Total Current House,		
DEFENDED ACCESTS		
DEFERRED ASSETS	0 16 043 00	0 12 927 50
Working Fund Advances	\$ 16,943 09	\$ 13,827 58
Insurance and Other Funds	1,670,366 08	1,757,226 97
Other Deferred Assets	391,760 03	452,941 90
Total Defended Access	\$ 2,079,069 20	\$ 2,223,996 45
Total Deferred Assets	\$ 2,019,009 20	\$ 2,225,550 45
UNADJUSTED DEBITS		
Prepayments	\$ 187,954 50	\$ 184,080 65
Discount on Funded Debt	446,687 51	482,274 89
Other Unadjusted Debits	820,176 98	544,797 76
Securities Issued or Assumed — Unpledged	5,201,200 00	3,757,000 00
Securities issued of Assumed — Onpieuged	0,201,200 00	0,107,000 00
	* * * * * * * * * * * * * * * * * * * *	0 1000 172 20
Total Unadjusted Debits	\$ 6,656,018 99	\$ 4,968,153 30
Grand Total	\$268,678,034 02	\$263,229,337 67
Crana Louis	9230,010,0001 02	1-3011

### Liabilities

CAPITAL STOCK	Dec. 31, 1947	Dec. 31, 1946
Common Stock — 395.051 shares	\$ 39,505,100 00	\$ 39,505,100 00
Common Stock — 395,051 shares	3,149,800 00	3,149,800 00
First Preferred Stock — 388,179 shares	38,817,900 00	38,817,900 00
Prior Preference Stock (Includes Negotiable Receipts)	23,138,500 00	23,138,500 00
The residence of the residence residence recompletely	20,100,000 00	20,100,000 00
Total Capital Stock	\$104,611,300 00	\$104,611,300 00
Premiums on Capital Stock	4,227,040 14	4,227,040 14
Total Capital Stock and Premiums	\$108,838,340 14	\$108,838,340 14
C. 11'1''' ( C '	A 1 200 00	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Stock Liability for Conversion	\$ 1,200 00	\$ 1,200 00
LONG-TERM DEBT		
Funded Debt Unmatured	\$ 93,642,400 00	\$ 94,536,600 00
Equipment Trust Certificates	348,000 00	522,000 00
Lease and Purchase Agreements — Equipment	11,192,429 78	11,121,520 19
Total Long-Term Debt	\$105,182,829 78	\$106,180,120 19
CURRENT LIABILITIES		
Traffic and Car Service Balances — Net Payable .	\$ 4,868,388 07	\$ 4,396,325 78
Audited Accounts and Wages Payable	3,663,239 32	2,777,250 65
Miscellaneous Accounts Payable	2,392,624 76	2,068,064 65
Interest Matured Unpaid	1,308,595 38	1,336,958 83
Dividends Matured Unpaid	13,503 62	13,503 62
Unmatured Interest Accrued	1,305,168 83	1,338,310 53
Accrued Accounts Payable	. 766,654 00	530,105 05
Taxes Accrued	4,105,782 29	2,217,034 66
Other Current Liabilities	41,803 20	49,496 79
Total Current Liabilities	\$ 18,465,759 47	\$ 14,727,050 56
DEFERRED LIABILITIES		
New York State E.G.C. Projects	\$ 341.359 94	\$ 240,022,65
Other Deferred Liabilities	\$ 341,359 94 89,064 59	\$ 349,933 65
Other Deferred Liabilities	09,004 39	46,776 08
Total Deferred Liabilities	\$ 430,424 53	\$ 396,709 73
UNADJUSTED CREDITS		
Insurance Reserves	\$ 50,000 00	\$ 50,000 00
Accrued Depreciation — Leased Property	241,978 03	523,079 07
Other Unadjusted Credits	652,689 47	510,569 69
Total Unadjusted Credits	\$ 944,667 50	\$ 1,083,648 76
	V 711,007 00	
SURPLUS		
Additions to Property through Income since		
June 30, 1907	\$ 14,822,146 85	\$ 14,822,146 85
Funded Debt Retired through Income and Surplus	16,603,961 37	15,890,805 53
Sinking Fund Reserves	56,621 04	37,309 09
Miscellaneous Fund Reserves	988,296 77	1,053,626 14
Appropriated Surplus — Purchase of Leased Line	. 257 000 00	
Bonds	357,000 00	357,000 00
Total Appropriated Surplus	\$ 32,828,026 03	\$ 32 160 997 61
Unearned Surplus	598,088 04	\$ 32,160,887 61
Earned Surplus (a)	1,388,698 53	598,088 04 d 756,707 36
	1,000,070 33	u 100,101 00
Total Surplus	\$ 34,814,812 60	\$ 32,002,268 29
Grand Total	\$268 678 024 02	\$262 220 227 67
Grand Total	\$268,678,034 02	\$263,229,337 67

<sup>(</sup>a) Includes Surplus Earned by Lessor Companies before Consolidation. d Indicates Debit Balance.

### Income Account

	37 1 1	T	Don
	Year ended	Increase or	Per
	Dec. 31, 1947	Decrease	Cent
Transportation Revenue			
Freight	\$61,259,600 94	\$7,492,667 06	13.94
Passenger	15,225,632 77	d 1,529,350 06	9.13
Excess Baggage	18,669 58	1,372 42	7.93
Parlor and Chair Car	48,479 09	d 9,551 56	16.46
	1,687,030 60	343,833 82	25.60
Mail	1,089,053 66	802,765 55	280.40
Express			17.89
Other Passenger-Train	323,941 70	49,168 77	
Milk	1,259,086 04	54,423 13	4.52
Switching	719,363 23	93,812 18	15.00
Total Townstantian			
Total Transportation	004 (20 057 (4	Ø7 200 141 21	0.00
Revenue	\$81,630,857 61	\$7,299,141 31	9.82
Incidental Revenue			THE RESIDENCE OF THE
	\$ 258,968 28	\$ 5,762 86	2.28
Dining and Buffet			
Station and Train Privileges .	163,791 68	d 21,059 88	11.39
Parcel Room	33,140 20	d 16,614 10	33.39
Storage — Freight Storage — Baggage	57,643 59	8,007 05	16.13
Storage — Baggage	5,684 02	d 321 22	5.35
Demurrage	418,588 69	d 38,172 24	8.36
Telegraph and Telephone	36,777 17	d 3,938 77	9.67
Grain Elevators	19,503 45	11,450 20	142.18
Power	72,206 13	9,123 31	14.46
Rents of Buildings and Other			
Property	1,073,066 20	d 113,741 66	9.58
Miscellaneous	331,305 98	d 8,938 63	2.68
Miscenaneous	331,303 90	a 0,000 00	2.00
Total Incidental Revenue .	\$ 2,470,675 39	a\$ 168,443 08	6.38
Joint Facility — Cr	\$ 182,272 93	d\$ 22,018 67	10.78
		1 210 20	16.43
Joint Facility — Dr	6,666 28	d 1,310 38	10.40
Total Joint Facility			
Operating Revenue	\$ 175,606 65	d\$ 20,708 29	10.55
Operating Revenue	Ф 175,000 05	αψ 20,700 20	10.00
Total Operating Revenues	\$84,277,139 65	\$7,109,989 94	9.21
0			
OPERATING EXPENSES			
Maintenance of Way and		0 (01 710 00	1.00
Structures	\$13,621,871 99	\$ 631,549 80	4.86
Maintenance of Equipment .	12,940,046 14	242,838 30	1.91
Traffic	1,212,319 02	60,522 04	5.25
Transportation	35,183,878 45	1,197,255 29	3.52
Miscellaneous Operations	365,218 25	46,453 39	14.57
General	3,161,286 61	179,678 28	6.03
Total Operating Expenses	\$66,484,620 46	\$2,358,297 10	3.68
Operating Ratio	(78.89%)	d (4.21%)	
Operating Ratio	(10.07/0)	u (4.21/0)	
Net Operating Revenue	\$17,792,519 19	\$4,751,692 84	36.44
iver Operating Recentle.	W11,172,017 17	(P1,101,072 OT	00.11

## Income Account (Continued)

	Year ended Dec. 31, 1947	Increase or Decrease	Per Cent
TAX ACCRUALS	\$8,271,598 51	\$3,184,447 87	62.60
Operating Income	\$9,520,920 68	\$1,567,244 97	19.70
Rent from Locomotives Rent from Passenger-Train	\$ 31,436 78	d\$ 27,046 39	46.25
Cars	561,650 13	d 89,175 57	13.70
Joint Facility Rent Income .	7,228 43 353,402 82	d 8,233 20 d 728 19	53.25 .21
Total Rent Income	\$ 953,718 16	d\$ 125,183 35	11.60
Hire of Freight Cars — Debit Balance	\$3,244,693 84	d\$ 28,631 98	.87
Balance	1,772 02	d 555 31	23.86
Rent for Passenger-Train Cars	644,656 27	12,041 51	1.90
Rent for Work Equipment	4,604 51	2,386 32	107.58
Joint Facility Rents	648,394 63	23,278 14	3.72
Total Rents Payable	\$4,544,121 27	\$ 8,518 68	.19
Net Rents Payable	\$3,590,403 11	\$ 133,702 03	3.87
Net Railway Operating Income	\$5,930,517 57	\$1,433,542 94	31.88
OTHER INCOME Income from Lease of Road			
and Equipment	\$ 4,446 91	d\$ 266,364 92	98.36
Miscellaneous Rent Income . Miscellaneous Nonoperating	300,472 94	d 3,387 28	1.11
Physical Property	16,752 92	10,187 78	155.18
Dividend Income	13,788 50	d 78,185 50	85.01
Income from Funded Securi-		d 70,100 00	00.01
ties	311,674 92	d 109,772 96	26.05
curities and Accounts Income from Sinking and	65,853 62	d 94,043 02	58.81
Other Reserve Funds	47,338 35	d 20,692 51	30.42
Miscellaneous Income	59,757 00	11,198 45	23.06
. Total Other Income	\$ 820,085 16	d\$ 551,059 96	40.19
Total Income	\$6,750,602 73	\$ 882,482 98	15.04

# Income Account (Concluded)

			Value of the second by
	Year ended Dec. 31, 1947	Increase or Decrease	Per Cent
Miscellaneous Deductions from Income			
Miscellaneous Rents	\$ 9,543 67 9,000 00	\$ 188 96	2.02
Miscellaneous Income Charges Income Applied to Sinking and	17,616 38	d 3,418 56	16.25
Other Reserve Funds	45,881 38	d 30,230 10	39.72
Total Miscellaneous De- ductions	\$ 82,041 43	a\$ 33,459 70	28.97
Income Available for Fixed Charges	\$6,668,561 30	\$ 915,942 68	15.92
Fixed Charges Rent for Leased Roads Interest on Funded Debt—	\$ 688,870 32	d \$ 282,836 20	29.11
Fixed Interest	2,733,912 90 20,235 23	d 39,896 38 8,128 68	1.44 67.14
Amortization of Discount on Funded Debt	29,311 36	d 1,036 85	3.42
Total Fixed Charges	\$3,472,329 81	d\$ 315,640 75	8.33
Income after Fixed Charges (Available Net Income) .	\$3,196,231 49	\$1,231,583 43	62.69
CONTINGENT CHARGES Sinking Fund — Series RR Bonds	\$ 679,102 00	_	
Contingent Interest Sinking Fund — Series A Bonds	1,215,180 02 53,365 79	d \$ 36,222 18 19,221 93	
Total Contingent Charges .	\$1,947,647 81	a\$ 17,000 25	
Net Income after Fixed Charges and Other De- ductions, transferred to Profit and Loss	\$1,248,583 68	\$1,248,583 68	

d Indicates decrease.

### Operating Expenses

	Year ended	Increase or	
	Dec. 31, 1947	Decrease	
MAINTENANCE OF WAY AND STRUCTURES			
Superintendence	\$ 811,364 80	\$ 36,286 15	
Roadway Maintenance	1,156,472 00	134,088 78	
Tunnels and Subways	41,871 89		
Bridges, Trestles and Culverts	262,672 61	12,699 62	
Ties	564,698 09	d 44,442 02	
Rails	10,865 31	185,089 63	
Other Track Material	301,804 99	d 285,913 97	
Rollast	152,767 21	d 142,178 85	
Ballast		83,889 29	
T C 1 1 1 C	3,410,352 47	1,357 63	
C: 100 D :11:	74,726 65	23,137 80	
Station and Office Buildings	590,342 89	d 44,628 87	
Roadway Buildings	58,194 26	d 653 04	
Water Stations	56,735 01	d 12,747 99	
Fuel Stations	39,384 90	d 9,785 48	
Shops and Enginehouses	495,505 18	d 10,540 80	
Grain Elevators	27,174 21	16,470 18	
Storage Warehouses	2,001 47	1,029 71	
Wharves and Docks	22,803 70	d 32,056 96	
Coal and Ore Wharves	22,174 72	d 22,129 09	
Telegraph and Telephone Lines	76,654 90	7,194 77	
Signals and Interlockers	937,137 74	34,609 80	
Power Plants	5,627 86	d 4,231 89	
Power-Transmission Systems	49,787 73	d 12,917 72	
Miscellaneous Structures	608 55	d 863 25	
Road Property — Depreciation	1,634,856 96	d 5,316 00	
Retirements — Road	341,784 43	191,814 83	
Roadway Machines	169,612 81	46,070 75	
Dismantling Retired Road Property .	116,079 56	63,613 31	
Small Tools and Supplies	209,481 30	35,049 89	
Removing Snow, Ice and Sand	1,209,786 82	365,663 93	
Public Improvements — Maintenance	258,337 25	55,413 72	
Injuries to Persons	116,060 46	33,566 07	
Insurance	28,162 52	8,627 22	
Stationery and Printing	11,664 54	1,963 29	
Other Expenses	9,918 39	d 14,331 54	
Maintaining Joint Tracks, Yards and	177 100 22	05'004	
Other Facilities — Dr	475,190 33	d 85,301 70	
Maintaining Joint Tracks, Yards and	(1712.11	21.22	
Other Facilities — Cr	64,712 46	d 21,952 60	
T . 1 M			
Total Maintenance of Way and	012 (01 071 00	0 (24 = 40 0=	
Structures	\$13,621,871 99	\$ 631,549 80	
Ratio to Total Operating Revenues .	(16.16%)	d (.67%)	
			_

d Indicates decrease.

# Operating Expenses (Continued)

	Year ended	Increase or
	Dec. 31, 1947	Decrease
MAINTENANCE OF EQUIPMENT		
Superintendence	\$ 598,579 64	\$ 16,333 04
Shop Machinery	315,531 10	d 3,585 42
	63,203 63	13,756 37
Power-Plant Machinery	03,203 03	13,730 37
Shop and Power-Plant Machinery —	07 226 00	72.00
Depreciation	97,236 00	72 00
Dismantling Retired Shop and Power-		201.21
Plant Machinery	46 54	d 394 24
Steam Locomotives — Repairs	3,647,200 15	d 555,952 49
Plant Machinery	1,854,101 42	497,696 75
Freight-Train Cars — Repairs	1,858,334 41	d 189,934 14
Passenger-Train Cars — Repairs	2,162,284 02	279,258 64
Work Equipment — Repairs	309,102 84	34,961 02
Miscellaneous Equipment — Repairs .	17,055 00	d 10,312 15
Dismantling Retired Equipment	56,663 59	27,306 31
Retirements — Equipment		1,400 00
Equipment — Depreciation	1,583,003 95	68,357 70
Equipment — Depreciation Equipment — Amortization of Defense	1,000,000 70	00,007 70
Position of Defense	25,712 88	151 00
Projects	99,256 90	24,113 49
Injuries to Persons		14,965 40
Insurance	52,682 23	
Stationery and Printing	11,880 43	2,045 48
Other Expenses	78,421 59	61,521 51
Maintaining Joint Equipment at Ter-		20 181 22
minals — Dr	117,447 53	d 39,171 66
Maintaining Joint Equipment at Ter-		
minals — Cr	7,697 71	d 249 69
Total Maintenance of Equipment .	\$12,940,046 14	\$ 242,838 30
Ratio to Total Operating Revenues .	(15.36%)	d (1.10%)
Traffic		
Superintendence	\$ 442,738 23	\$ 7,761 13
Outside Agencies	391,005 94	19,305 05
Advertising	260,050 06	20,369 24
Traffic Associations	49,018 04	1,264 64
Industrial and Immigration Bureaus .	18,164 17	1,113 86
	18 48	d 2 40
Insurance		10,710 52
Stationery and Printing	51,324 10	10,710 32
	Ø 1 212 210 02	¢ 60 522 04
Total Traffic	\$ 1,212,319 02	\$ 60,522 04
Ratio to Total Operating Revenues .	(1.44%)	d (.05%)

d Indicates decrease.

# Operating Expenses (Continued)

	Year Ended	Increase or
	Dec. 31, 1947	Decrease
TRANSPORTATION		
Superintendence	\$ 826,265 65	d\$ 25,865 12
Dispatching Trains		
Station Employees	311,759 21	d 4,299 72
Station Employees	6,147,660 11	239,865 74
Weighing, Inspection and Demurrage		
Bureaus	32,110 03	10,438 79
Station Supplies and Expenses	515,938 14	27,292 49
Yardmasters and Yard Clerks	1,026,021 98	73,745 74
Yard Conductors and Brakemen	2,058,595 68	40,551 21
Yard Switch and Signal Tenders	312,578 78	9,479 58
Yard Enginemen		
Vand Matarman	545,548 46	d 102,228 41
Yard Motormen	638,530 55	88,430 97
Yard Switching Fuel	545,118 72	d 33,106 21
Water for Yard Locomotives	13,802 43	d 3,556 83
Lubricants for Yard Locomotives	21,795 72	d 1,167 66
Other Supplies for Yard Locomotives .	14,524 51	471 16
Enginehouse Expenses — Yard	288,185 97	d 10,045 18
Yard Supplies and Expenses	79,090 97	
Operating Joint Yards and Terminals	19,090 91	5,046 65
— De	2 176 251 62	10 200 22
- Dr	2,176,351 62	d 19,298 27
Operating Joint Yards and Terminals		
— Cr	386,935 08	14,341 88
Train Enginemen	2,001,956 93	d 362,063 14
Train Motormen	1,176,889 87	343,315 00
Train Fuel	4,118,691 69	93,048 17
Train Power Purchased		d 72,446 36
Water for Train Locomotives	123,761 67	d 14,748 13
Lubricants for Train Locomotives	207,576 43	
Other Supplies for Train Locomotives .		30,456 85
	107,182 65	25,262 51
Enginehouse Expenses — Train	1,580,451 33	9,205 02
Trainmen	4,561,811 49	157,118 98
Train Supplies and Expenses	2,049,650 45	99,447 42
Signal and Interlocker Operation	574,314 42	d 2,886 38
Crossing Protection	1,406,107 19	89,911 67
Drawbridge Operation	43,831 85	3,726 48
Telegraph and Telephone Operation .	51,399 37	d .120 21
Stationery and Printing	181,305 90	26,406 64
Other Expenses	49,599 12	
Operating Joint Tracks and Facilities	49,399 12	d 3,064 86
Operating Joint Tracks and Facilities	25 700 00	440
— Dr	35,700 86	110 74
Operating Joint Tracks and Facilities		
— Cr	63,777 47	d 1,119 93
Insurance	13,615 39	2,226 41
Clearing Wrecks	75,494 67	11,254 74
Damage to Property	23,032 86	d 4,494 70
Damage to Live Stock on Right of Way	1,831 63	d 2,771 83
Loss and Damage — Freight	1,064,623 96	
Loss and Damage — Freight Loss and Damage — Baggage		252,056 25
Injuries to Persons	5,174 06	d 3,532 02
Injuries to Persons	626,708 68	237,303 06
Total Turnet and the	025 402 050 15	A
Total Transportation	\$35,183,878 45	\$1,197,255 29
Ratio to Total Operating Revenues .	(41.75%)	d (2.29%)

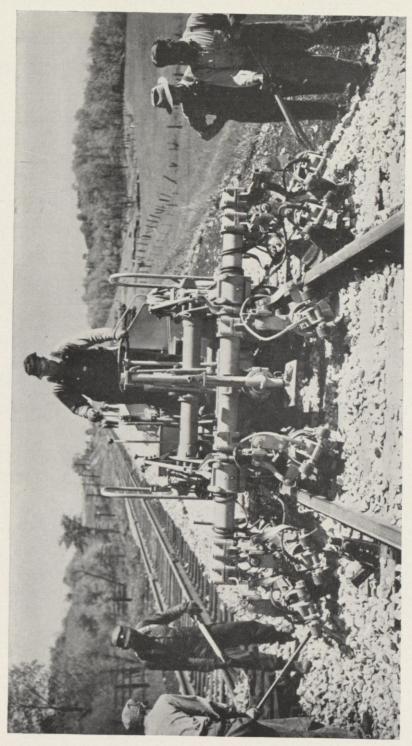
### Operating Expenses (Concluded)

	Year ended Dec. 31, 1947	Increase or Decrease
MISCELLANEOUS OPERATIONS Dining and Buffet Service Grain Elevators Other Miscellaneous Operations	\$ 335,165 29 30,035 70 17 26	\$ 35,350 79 11,093 62 8 98
Total Miscellaneous Operations Ratio to Total Operating Revenues .	\$ 365,218 25 (.43%)	\$ 46,453 39 (.01%)
General Salaries and Expenses of General Officers Salaries and Expenses of Clerks and Attendants General Office Supplies and Expenses Law Expenses Insurance Pensions Stationery and Printing Valuation Expenses Other Expenses General Joint Facilities — Dr.	\$ 204,392 62 2,124,592 56 159,477 61 174,430 30 760 63 261,979 94 64,029 40 36,145 12 111,842 18 23,636 25	
Total General	\$ 3,161,286 61 (3.75%)	\$ 179,678 28 d (.11%)
Total Operating Expenses Ratio to Total Operating Revenues .	\$66,484,620 46 (78.89%)	\$2,358,297 10 d (4.21%)

d Indicates decrease.



New Lowell Tower looking north. Contains the largest centralized traffic control machine on the Boston and Maine system.



MULTIPLE ELECTRIC TAMPER - 12 TOOL MODEL

By use of this modern machine the efficiency of tie tamping operations is increased about 250% .

# Capital Stock and Long-Term Debt Outstanding

Capital Stock	Amou Outstan		Dividend Rate
Prior Preference Prior Preference Negotiable Receipts First Preferred Class A  " " B  " " C  " " D  Preferred	18,860, 7,648, 7,917, 4,327, 65,	500 00 000 00 800 00 100 00 000 00 800 00 100 00	7 % 5 % 8 % 7 % 10 % 4½% 6 %
Long-Term Debt			nount tanding
Bonds secured by Mortgage dated December supplemented as of July 1, 1940  Series II		1,2 58,4 9 3,0 29,9 \$ 93,6	25,000 00 237,000 00 334,400 00 002,000 00 065,000 00 079,000 00 642,400 00 642,400 00 192,429 78
Grand Total Long-Term Debt		\$105,1	182,829 78

Cumulative Dividends U Since †Jan. 1, 1932–*Oct.		Amount in Hands of Public	Owned, Deposited with Trustee, or Held in Treasury**
*\$113 75 " " 8,99 *\$162 50 " " 7,020		\$ 22,938,900 00 2,500 00 18,834,100 00 7,648,800 00 7,910,300 00 4,323,900 00 65,000 00 3,149,800 00 39,472,800 00	\$ 197,100 00 25,900 00 6,800 00 3,100 00 32,300 00
		\$104,346,100 00	\$ 265,200 00
Date of Maturity	Rate		
July 1, 1950 May 1, 1955 July 1, 1960 April 1, 1961 September 1, 1967 July 1, 1970  June-Dec. 1, 1948-49 Various	3 % 5 % 4 % 434% 5 % 4½% Various	\$ 10,000 00 1,237,000 00 56,847,400 00 897,000 00 2,424,000 00 26,630,000 00 \$ 88,045,400 00 348,000 00 11,192,429 78	a \$ 15,000 00 1,587,000 00 a 5,000 00 a 641,000 00 3,349,000 00 \$5,597,000 00
		\$ 99,585,829 78	\$5,597,000 00

<sup>\*\*</sup> No interest.
a Deposited with and held by Trustee in Lieu of Mortgaged Property Sold, to release would require cash payment at par.

CAPITAL STOCK	Amount Outstanding	Dividend Rate (Paid as rental)	Owned, Deposited with Trustee, or Held in Treasury or Insurance Fund
Stony Brook	\$ 300,000 00 3,068,400 00	7% 6%	\$ 31,700 00 880,000 00
Northern	3,193,000 00	6%	326,600 00
Vermont Valley	1,000,000 00	-	1,000,000 00
Sullivan County	a 500,000 00	-	
Total Capital Stock	\$8,061,400 00		\$2,238,300 00

a All owned by Vermont Valley Railroad.

Funded Debt	Bonds Outstanding	Date of Maturity	Rate	Owned, Deposited with Trustee, or Held in Treasury or Insurance Fund
Sullivan County First Mortgage Vermont Valley First Mortgage	\$357,000 00 352,000 00	April 1, 1944 Oct. 1, 1955	6%	* \$357,000 00
Total Funded Debt	\$709,000 00			\$357,000 00

<sup>\*</sup> These bonds have matured and are held as an overdue obligation of the Sullivan County Railroad.

### Miles of Road Operated, December 31, 1947

STEAM ROA	DS				Owned	Leased	Total
Main Lines					827 68 655 27	187 20 4 79 82 22	1,014 88 660 06 82 22
Total Road Operated . Second Track					1,482 95 463 99 4 11 913 54	274 21 a 114 17 b 5 44 113 41	1,757 16 578 16 9 55 1,026 95
Total Track Operated .					2,864 59	507 23	3,371 82

a Includes trackage rights 14.47 miles. b Includes trackage rights .99 mile.

# Earned Surplus - December 31, 1947

Item	Debit	Credit
Balance, December 31, 1946 (Debit)	(a)\$ 756,707 36	
Credit Balance from Income Account for year 1947		\$1,248,583 68
Adjustment to Par of Boston and Maine Railroad Bonds purchased during 1947		542,554 14
Profit on Retired Miscellaneous Property Sold		336,266 06
Profit on sale of Boston Garden-Arena Corporation Capital Stock		18,980 09
Miscellaneous Debits - Net	978 08	
Credit Balance, December 31, 1947	(a) 1,388,698 53	
	\$2,146,383 97	\$2,146,383 97

(a) Includes Surplus Earned by Lessor Companies before Consolidation.



Interior of new Diesel Shop at Boston.

D	TITLE ACCOUNT	Gross Expenditures	Property Retired	Net Capital Changes
ROAD	Paralmentan	\$ 127,306 96	\$ 75,820 96	\$ 51,486 00
1 2	Engineering	25,936 70	826,912 32	800,975 62
21/2	Land for Transportation Purposes . Other Right-of-Way Expenditures .	643 00	020,312 02	643 00
3	Crading	273,508 29	53,261 38	220,246 91
6	Grading	340,526 58	114,792 10	225,734 48
8	Ties	113,895 44	52,908 26	60,987 18
9	Rails	247,381 20	212,086 27	35,294 93
10	Other Track Material	378,106 40	242,323 05	135,783 35
11	Ballast	30,801 44	10,313 34	20,488 10
12	Track Laying and Surfacing	130,219 12	45,724 84	84,494 28
13	Fences, Snowsheds and Signs	16,268 09	133,859 92	117,591 83
16	Station and Office Buildings	243,973 59	363,368 13	119,394 54
17	Roadway Buildings	3,772 75	1,228 00	2,544 75
18	Water Stations	4,162 37	98,489 28	94,326 91
19	Fuel Stations	116,521 14	84,916 93	31,604 21
20	Shops and Enginehouses	810,230 73	286,458 02	523,772 71
21	Grain Elevators	_	27,913 74	27,913 74
23	Wharves and Docks	_	94,346 00	94,346 00
26	Telegraph and Telephone Lines	9.591 00	201 24	9,389 76
27	Signals and Interlockers	728,097 66	352,061 28	376,036 38
29	Power Plants	29,296 41	15,438 45	13,857 96
31	Power-Transmission Systems	59,531 66	34,550 58	24,981 08
35	Miscellaneous Structures	164 17	_	164 17
37	Roadway Machines	128,151 63	57,343 30	70,808 33
38	Roadway Small Tools	9,168 17	1,344 82	7,823 35
39	Public Improvements — Construc-			
	tion	62,496 77	15,810 07	46,686 70
44	Shop Machinery	162,009 88	22,781 87	139,228 01
45	Power-Plant Machinery	62,500 15	5,864 64	56,635 51
	Total Road	\$4,114,261 30	\$3,230,118 79	\$ 884,142 51
EOUIP	MENT			
51	Steam Locomotives	18,382 86	2,777,045 77	2,758,662 91
52	Other Locomotives	189,339 98	75,097 09	114,242 89
53	Freight-Train Cars	2,160,582 75	1,242,547 10	918,035 65
54	Passenger-Train Cars	1,451,706 29	426,486 04	1,025,220 25
57	Work Equipment	379,767 46	94,380 81	285,386 65
58	Miscellaneous Equipment	10,383 33	10,148 14	235 19
30	Total Equipment	\$4,210,162 67	\$4,625,704 95	\$ 415,542 28
		91,210,102 07	94,020,104 00	p 410,040 NO
	RAL EXPENDITURES	# C#O ##	* NO.1 00	400.00
72	General Officers and Clerks	5,650 77	5,784 00	133 23
73	Law	3,445 25	3,411 58	33 67
74	Stationery and Printing	687 91	378 00	309 91
75	Taxes	1,929 58	1,967 00	37 42
76	Interest during Construction	44,412 02	88,443 14	44,031 12
77	Other Expenditures — General	1,240 73	1,335 00	94 27
	Total General Expenditures	\$ 57,366 26	\$ 101,318 72	\$ 43,952 46
	Totals (See Note)	\$8,381,790 23	* \$7,957,142 46	\$ 424,647 77

#### \* DISPOSITION OF CREDITS

ciation — Road an Rail, etc. Sold .									1									4 027 272 05
																		4,031,213 93
																		2,109,504 86
- Miscellaneous	Debits																	82,844 56
	enses	enses	enses	enses	enses	enses	enses	enses	enses	enses	enses	enses	enses	enses	enses	enses	enses	upplies — Usable Material

Note. — "Gross Expenditures" includes Journal Entries amount \$1,064,485.47 to conform with Interstate Commerce Commission accounting requirements in connection with the acquisition of the Pemigewasset Valley Railroad — \$694,960.39, and the Turners Falls Branch — \$369,525.08.

### Operating Statistics

Average Miles of Road Operated   1,748.47   2.40   Passenger Service   1,408.21   1.99		Year Ended Dec. 31, 1947	
Freight Service	AVERAGE MILES OF ROAD OPERATED		
Total		1,748.47	2.40
TRAIN MILEAGE         3,839,975         13,372           Passenger service (with locomotives)         6,767,781         1,600           Passenger service (without locomotives)         226,784         41,693           Work service         193,231         14,674           Total train miles         11,027,771         15,247           *LOCOMOTIVE MILEAGE         4,119,461         42,613           Freight service         7,009,942         77,008           Train switching         308,376         15,216           Yard switching         2,567,340         137,472           Work service         279,411         51,188           Total locomotive miles         14,284,530         190,789           CAR MILEAGE         Freight-Train Car Miles:         2,040,712         2,040,712           Loaded         143,484,601         2,040,712         2,040,712           Empty         54,895,692         1,930,081           Caboose         3,911,875         40,998           Total freight-train car miles         202,292,168         4,011,791           Passenger-Train Car Miles:         21,211,513         2,026,293           Sleeping and parlor cars         3,777,352         99,731           Club, lounge, dining and observa	Passenger Service	1,408.21	1.99
Freight service (with locomotives)   3,839,975   13,372   Passenger service (with locomotives)   6,767,781   1,800   Passenger service (without locomotives)   226,784   41,693   Work service   11,027,771   15,247	Total	1,760.64	2.47
Passenger service (with locomotives)			
Passenger service (with locomotives)	Freight service (with locomotives)		
## LOCOMOTIVE MILEAGE Freight service	Passenger service (with locomotives)		
*LOCOMOTIVE MILEAGE Freight service	Passenger service (without locomotives)		41,693
*LOCOMOTIVE MILEAGE Freight service Passenger service (7,009,942 77,108 7,009,942 77,108 308,376 15,216 Yard switching (2,567,340 137,472 Work service (14,284,530 190,789  *CAR MILEAGE Freight-Train Car Miles: Loaded Freight-Train Car Miles: Loaded (2,040,712 Empty (54,895,692 1,930,081  *Total freight-train car miles  Passenger-Train Car Miles: Passenger-Train Car Miles: Passenger coaches Sleeping and parlor cars (202,292,168 3,777,352 99,731 Club, lounge, dining and observation cars Mail, express, and baggage cars, and combination cars other than passenger Combination passenger cars (mail, express, or baggage with passenger)  *Total passenger-train car miles  *Total passenger-train car miles  *Total passenger-train car miles	Work service	193,231	14,074
Freight service	Total train miles	11,027,771	15,247
Passenger service   7,009,42   77,108     Train switching   308,376   15,216     Yard switching   2,567,340   137,472     Work service   279,411   51,188     Total locomotive miles   14,284,530   190,789     CAR MILEAGE   Freight-Train Car Miles:   Loaded   143,484,601   2,040,712     Empty   54,895,692   1,930,081     Caboose   3,911,875   40,998     Total freight-train car miles   202,292,168   4,011,791     Passenger-Train Car Miles:   Passenger coaches   21,211,513   2,026,293     Sleeping and parlor cars   3,777,352   99,731     Club, lounge, dining and observation cars   307,062   15,930     Business cars   3,777,352   99,731     Club, lounge, dining and observation cars other than passenger   2,040,712     Combination passenger cars (mail, express, or baggage with passenger)   4,585,581   131,650     Total passenger-train car miles   45,890,455   1,989,853     Total transportation service car miles   45,890,455   1,989,853     Total transportation service car miles   45,890,455   1,989,853     AVERAGES   Operating revenues per mile of road   37,761, 62   1,390,48     Net railway operating income per mile of road   3,7,761, 62   1,390,48     Net railway operating income per mile of road   3,368,39   817,80     Operating expenses per train mile   5,78   66     Operating expenses per train mile   5,55   14     Total freight cars per revenue train mile   51,66   1,22     Loaded freight cars per revenue train mile   51,66   1,22     Loaded freight cars per revenue train mile   51,66   1,22     Loaded freight cars per revenue train mile   51,66   1,22     Loaded freight cars per revenue train mile   51,66   1,22     Loaded freight cars per revenue train mile   51,66     Empty freight cars per revenue train mile   51,66     Loaded freight	* Locomotive Mileage		
Passenger service   7,009,42   77,108     Train switching   308,376   15,216     Yard switching   2,567,340   137,472     Work service   279,411   51,188     Total locomotive miles   14,284,530   190,789     CAR MILEAGE   Freight-Train Car Miles:   Loaded   143,484,601   2,040,712     Empty   54,895,692   1,930,081     Caboose   3,911,875   40,998     Total freight-train car miles   202,292,168   4,011,791     Passenger-Train Car Miles:   Passenger coaches   21,211,513   2,026,293     Sleeping and parlor cars   3,777,352   99,731     Club, lounge, dining and observation cars   307,062   15,930     Business cars   3,777,352   99,731     Club, lounge, dining and observation cars other than passenger   2,040,712     Combination passenger cars (mail, express, or baggage with passenger)   4,585,581   131,650     Total passenger-train car miles   45,890,455   1,989,853     Total transportation service car miles   45,890,455   1,989,853     Total transportation service car miles   45,890,455   1,989,853     AVERAGES   Operating revenues per mile of road   37,761, 62   1,390,48     Net railway operating income per mile of road   3,7,761, 62   1,390,48     Net railway operating income per mile of road   3,368,39   817,80     Operating expenses per train mile   5,78   66     Operating expenses per train mile   5,55   14     Total freight cars per revenue train mile   51,66   1,22     Loaded freight cars per revenue train mile   51,66   1,22     Loaded freight cars per revenue train mile   51,66   1,22     Loaded freight cars per revenue train mile   51,66   1,22     Loaded freight cars per revenue train mile   51,66   1,22     Loaded freight cars per revenue train mile   51,66     Empty freight cars per revenue train mile   51,66     Loaded freight		4,119,461	42,613
Train switching         308,376         15,216           Yard switching         2,567,340         137,472           Work service         279,411         51,188           Total locomotive miles         14,284,530         190,789           CAR MILEAGE         143,484,601         2,040,712           Empty         54,895,692         1,930,081           Caboose         3,911,875         40,998           Total freight-train car miles         202,292,168         4,011,791           Passenger Train Car Miles:         21,211,513         2,026,293           Passenger coaches         21,211,513         2,026,293           Sleeping and parlor cars         307,062         15,930           Business cars         307,062         15,930           Mail, express, and baggage cars, and combination cars other than passenger.         15,996,824         16,687           Combination passenger cars (mail, express, or baggage with passenger)         4,585,581         131,650           Total passenger-train car miles         45,890,455         1,989,853           Total transportation service car miles         45,890,455         1,989,853           Total transportation service car miles         45,890,455         1,989,853           Operating revenues per mile of road         <	Passenger service	7,009,942	77,108
Yard switching         2,567,340         279,411         51,188           Total locomotive miles         14,284,530         190,789           CAR MILEAGE         143,484,601         2,040,712           Empty         54,895,692         1,930,081           Caboose         3,911,875         40,998           Total freight-train car miles         202,292,168         4,011,791           Passenger-Train Car Miles:         21,211,513         2,026,293           Passenger coaches         21,211,513         2,026,293           Sleeping and parlor cars         3,777,352         99,731           Club, lounge, dining and observation cars         12,123         3,764           Mail, express, and baggage cars, and combination cars other than passenger         12,123         3,764           Combination passenger cars (mail, express, or baggage with passenger)         4,585,581         131,650           Total passenger-train car miles         45,890,455         1,989,853           Total transportation service car miles         248,182,623         6,001,644           AVERAGES         Operating expenses per mile of road         37,761,62         1,390,48           Operating revenues per train mile         \$7,78         6,68           Operating expenses per train mile         5,78	Train switching		
Work service         279,411         51,188           Total locomotive miles         14,284,530         190,789           CAR MILEAGE Freight-Train Car Miles:	Yard switching	2,567,340	137,472
Total locomotive miles         14,284,530         190,789           CAR MILEAGE           Freight-Train Car Miles:         143,484,601         2,040,712           Empty         54,895,692         1,930,081           Caboose         3,911,875         40,998           Total freight-train car miles         202,292,168         4,011,791           Passenger Train Car Miles:         21,211,513         2,036,293           Sleeping and parlor cars         3,777,352         99,731           Club, lounge, dining and observation cars         12,123         3,764           Mail, express, and baggage cars, and combination cars other than passenger.         12,123         3,764           Mail, express, and baggage cars, and combination cars other than passenger cars (mail, express, or baggage with passenger)         15,996,824         16,687           Tombination passenger cars (mail, express, or baggage with passenger)         4,585,581         131,650           Total passenger-train car miles         45,890,455         1,989,853           Total transportation service car miles         248,182,623         6,001,644           AVERAGES         Operating expenses per mile of road         37,761,62         1,390,48           Operating revenues per train mile         \$ 7.78 <td>Work service</td> <td>279,411</td> <td></td>	Work service	279,411	
CAR MILEAGE         Freight-Train Car Miles:         143,484,601         2,040,712           Empty         54,895,692         1,930,081           Caboose         3,911,875         40,998           Total freight-train car miles         202,292,168         4,011,791           Passenger-Train Car Miles:         21,211,513         2,026,293           Passenger coaches         21,211,513         2,026,293           Sleeping and parlor cars         3,777,352         99,731           Club, lounge, dining and observation cars         12,123         3,764           Mail, express, and baggage cars, and combination cars other than passenger.         15,996,824         16,687           Combination passenger cars (mail, express, or baggage with passenger)         4,585,581         131,650           Total passenger-train car miles         45,890,455         1,989,853           Total transportation service car miles         248,182,623         6,001,644           AVERAGES         Operating revenues per mile of road         37,761,62         1,390,48           Net railway operating income per mile of road         3,368,39         817,80           Operating expenses per train mile         6,14         24           Net railway operating income per train mile         55         14           Total fr		14,284,530	190,789
Loaded   Empty	CAR MILEAGE		
Empty Caboose         54,895,692         1,930,081           Caboose         3,911,875         40,998           Total freight-train car miles         202,292,168         4,011,791           Passenger-Train Car Miles:		143,484,601	2.040.712
Caboose         3,911,875         40,998           Total freight-train car miles         202,292,168         4,011,791           Passenger-Train Car Miles:	Empty		
Passenger-Train Car Miles:   Passenger coaches   21,211,513   3,777,352   99,731     Club, lounge, dining and observation cars   307,062   15,930     Business cars   12,123   3,764     Mail, express, and baggage cars, and combination cars other than passenger   15,996,824   16,687     Combination passenger cars (mail, express, or baggage with passenger)   4,585,581   131,650     Total passenger-train car miles   45,890,455   1,989,853     Total transportation service car miles   248,182,623   6,001,644     AVERAGES   Operating revenues per mile of road   37,761,62   1,390,48     Net railway operating income per mile of road   37,761,62   1,390,48     Operating revenues per train mile   \$7.78   68     Operating expenses per train mile   \$7.78   68     Operating expenses per train mile   \$7.78   5.50     Operating expenses per train mile   \$7.78   5.50     Other trailway operating income per train mile   \$7.78   5.50     Other trailway operating income per train mile   \$7.78   5.50     Other trailway operating income per train mile   \$7.78   5.50     Other trailway operating income per train mile   \$7.78   \$68     Other trailway operating income per train mile   \$7.80     Other trailway operating income per mile of trailway operating income per mile of trailw	Caboose		
Passenger-Train Car Miles:       21,211,513       2,036,293         Sleeping and parlor cars       3,777,352       99,731         Club, lounge, dining and observation cars       307,062       15,930         Business cars       12,123       3,764         Mail, express, and baggage cars, and combination cars other than passenger       15,996,824       16,687         Combination passenger cars (mail, express, or baggage with passenger)       4,585,581       131,650         Total passenger-train car miles       45,890,455       1,989,853         Total transportation service car miles       248,182,623       6,001,644         AVERAGES       Operating revenues per mile of road       37,761,62       1,390,48         Net railway operating income per mile of road       3,368,39       817,80         Operating expenses per train mile       \$ 7,78       \$ 68         Operating expenses per train mile       55       14         Net railway operating income per train mile       51,66       1,22         Net railway operating income per train mile       51,66       1,22         Loaded freight cars per revenue train mile       37,37       66         Empty freight cars per revenue train mile       14,30       .55			4,011,791
Passenger coaches   Sleeping and parlor cars   3,777,352   99,731	D		
Sleeping and parlor cars		21 211 512	0.000.000
12,123   3,764     Mail, express, and baggage cars, and combination cars other than passenger cars (mail, express, or baggage with passenger)   15,996,824   16,687     Combination passenger cars (mail, express, or baggage with passenger)   4,585,581   131,650     Total passenger-train car miles   45,890,455   1,989,853     Total transportation service car miles   248,182,623   6,001,644     AVERAGES   Operating revenues per mile of road   37,761,62   1,390,48     Net railway operating income per mile of road   3,368,39   817,80     Operating revenues per train mile   \$7,78   68     Operating expenses per train mile   \$7,78   68     Operating expenses per train mile   51,66   1,22     Loaded freight cars per revenue train mile   37,37   66     Empty freight cars per revenue train mile   14,30   55     Empty freight cars per revenue train mile   14,30   55	Passenger coacnes		
12,123   3,764     Mail, express, and baggage cars, and combination cars other than passenger cars (mail, express, or baggage with passenger)   15,996,824   16,687     Combination passenger cars (mail, express, or baggage with passenger)   4,585,581   131,650     Total passenger-train car miles   45,890,455   1,989,853     Total transportation service car miles   248,182,623   6,001,644     AVERAGES   Operating revenues per mile of road   37,761,62   1,390,48     Net railway operating income per mile of road   3,368,39   817,80     Operating revenues per train mile   \$7,78   68     Operating expenses per train mile   \$7,78   68     Operating expenses per train mile   51,66   1,22     Loaded freight cars per revenue train mile   37,37   66     Empty freight cars per revenue train mile   14,30   55     Empty freight cars per revenue train mile   14,30   55	Sleeping and parlor cars		
Mail, express, and baggage cars, and combination cars other than passenger.  Combination passenger cars (mail, express, or baggage with passenger)  Total passenger-train car miles  Total transportation service car miles  AVERAGES  Operating revenues per mile of road Operating expenses per mile of road Net railway operating income per mile of road Operating revenues per train mile Operating expenses per train mile  Total freight cars per revenue train mile  Loaded freight cars per revenue train mile Empty freight cars per revenue train mile  15,996,824  4,585,581  131,650  45,890,455  1,989,853  248,182,623  6,001,644  4,7867.33  \$4,099.70  1,390.48  817.80  817.80  68  614  24  Net railway operating income per mile of road Signature of the cars of the	Club, lounge, dining and observation cars		
than passenger.       15,996,824       16,687         Combination passenger cars (mail, express, or baggage with passenger)       4,585,581       131,650         Total passenger-train car miles       45,890,455       1,989,853         Total transportation service car miles       248,182,623       6,001,644         AVERAGES       Operating revenues per mile of road       37,761.62       1,390.48         Net railway operating income per mile of road       3,368.39       817.80         Operating revenues per train mile       6.14       24         Net railway operating income per train mile       5.5       14         Total freight cars per revenue train mile       51.66       1.22         Loaded freight cars per revenue train mile       37.37       66         Empty freight cars per revenue train mile       14.30       .55	Business cars	12,123	3,704
Combination passenger cars (mail, express, or baggage with passenger)         4,585,581         131,650           Total passenger-train car miles         45,890,455         1,989,853           Total transportation service car miles         248,182,623         6,001,644           AVERAGES         S47,867.33         \$4,099.70           Operating revenues per mile of road         37,761.62         1,390.48           Net railway operating income per mile of road         3,368.39         817.80           Operating revenues per train mile         \$ 7.78         \$ 68           Operating expenses per train mile         6.14         24           Net railway operating income per train mile         55         14           Total freight cars per revenue train mile         51.66         1.22           Loaded freight cars per revenue train mile         37.37         66           Empty freight cars per revenue train mile         14.30         55	Mail, express, and baggage cars, and combination cars other	15 006 004	16 607
passenger)         4,585,581         131,650           Total passenger-train car miles         45,890,455         1,989,853           Total transportation service car miles         248,182,623         6,001,644           AVERAGES         Operating revenues per mile of road         \$47,867.33         \$4,099.70           Operating expenses per mile of road         37,761.62         1,390.48         817.80           Operating revenues per train mile         \$ 7.78         68         68           Operating expenses per train mile         55         14           Net railway operating income per train mile         51.66         1.22           Net railway operating income per train mile         51.66         1.22           Loaded freight cars per revenue train mile         37.37         66           Loaded freight cars per revenue train mile         14.30         55	than passenger	15,990,824	10,087
Total passenger-train car miles         45,890,455         1,989,853           Total transportation service car miles         248,182,623         6,001,644           AVERAGES         Operating revenues per mile of road         \$47,867.33         \$4,099.70           Operating expenses per mile of road         37,761.62         1,390.48           Net railway operating income per mile of road         3,368.39         817.80           Operating revenues per train mile         \$ 7.78         \$ 68           Operating expenses per train mile         6.14         24           Net railway operating income per train mile         .55         .14           Total freight cars per revenue train mile         51.66         1.22           Loaded freight cars per revenue train mile         37.37         .66           Empty freight cars per revenue train mile         14.30         .55		4.585.581	131 650
Total transportation service car miles         248,182,623         6,001,644           AVERAGES         Operating revenues per mile of road         \$47,867.33         \$4,099.70           Operating expenses per mile of road         37,761.62         1,390.48           Net railway operating income per mile of road         3,368.39         817.80           Operating revenues per train mile         \$ 7.78         \$ 68           Operating expenses per train mile         6.14         .24           Net railway operating income per train mile         .55         .14           Total freight cars per revenue train mile         51.66         1.22           Loaded freight cars per revenue train mile         37.37         .66           Empty freight cars per revenue train mile         14.30         .55		1,000,001	
AVERAGES         \$47,867.33         \$4,099.70           Operating expenses per mile of road         37,761.62         1,390.48           Net railway operating income per mile of road         3,368.39         817.80           Operating revenues per train mile         \$ 7.78         \$ 68           Operating expenses per train mile         6.14         24           Net railway operating income per train mile         .55         .14           Total freight cars per revenue train mile         51.66         1.22           Loaded freight cars per revenue train mile         37.37         .66           Empty freight cars per revenue train mile         14.30         .55	Total passenger-train car miles	45,890,455	1,989,853
Operating revenues per mile of road . \$47,867.33 \$4,099.70 Operating expenses per mile of road . 37,761.62 Net railway operating income per mile of road . 3,368.39 817.80 Operating revenues per train mile . \$7.78 Operating expenses per train mile . 6.14 Net railway operating income per train mile	Total transportation service car miles	248,182,623	6,001,644
Operating expenses per mile of road Net railway operating income per mile of road Operating revenues per train mile Operating expenses per mile of road Operating income per mile of road Operating expenses per train mile Operating expenses per t			
Operating expenses per mile of road Net railway operating income per mile of road Operating revenues per train mile Operating expenses per mile of road Operating expenses per mile of road Operating expenses per mile of road Operating expenses per train mile Operating expenses p	Operating revenues per mile of road		\$4,099.70
Net railway operating income per mile of road 3,368.39 817.80  Operating revenues per train mile . \$ 7.78 \$ 68  Operating expenses per train mile . 6.14  Net railway operating income per train mile . 55 14  Total freight cars per revenue train mile . 51.66 1.22  Loaded freight cars per revenue train mile . 37.37 66  Empty freight cars per revenue train mile . 14.30 55	Operating expenses per mile of road	37,761.62	1,390.48
Operating revenues per train mile	Net railway operating income per mile of road	3,368.39	817.80
Operating expenses per train mile 6.14 24 Net railway operating income per train mile			
Net railway operating income per train mile	Operating revenues per train fille		
Total freight cars per revenue train mile	Not railway operating income per train mile		
Loaded freight cars per revenue train mile			
Empty freight cars per revenue train mile	Total freight cars per revenue train mile	51.66	1.22
Empty freight cars per revenue train mile		37.37	.66
		14.30	.55
Total passenger cars per train line			
	Total passenger cars per train mile	0.50	.24

<sup>\*</sup> Includes 6,350,876 Diesel locomotive miles. Italics indicate decrease.

### Traffic Statistics

	Year Ended Dec. 31, 1947	Increase or Decrease
FREIGHT Freight Revenue	\$ 61,259,601	\$ 7,492,667
Tons of revenue freight carried	23,892,658 1,468,340	271,966 128,320
Total tons of freight carried	25,360,998	143,646
Tons of revenue freight carried one mile	3,688,980,389 125,207,753	26,347,569 18,278,887
Total tons of freight carried one mile	3,814,188,142	44,626,456
Passenger Passenger Revenue:		
Monthly commutation ticket passengers	\$ 1,108,019.52 1,523,337.12	\$ 81,864.98
All other commutation ticket passengers	7,717,835.97	34,117.14 951,166.74
Interline ticket passengers	4,876,440.16	694,165.44
Total passenger revenue	\$15,225,632.77	\$1,529,350.06
Number of Passengers Carried:	910,220,002.77	61,020,000.00
Monthly commutation ticket passengers	4,858,450	301,819
All other commutation ticket passengers	8,408,206	170,105
Single fare ticket passengers (not including interline)	10,948,072	2,620,334
Interline ticket passengers	2,103,991	606,685
Total number of passengers carried	26,318,719	3,095,305
Number of Passengers carried one mile:		
Monthly commutation ticket passengers	118,451,453	7,342,682
All other commutation ticket passengers	83,842,385	1,632,327
Single fare ticket passengers (not including interline).	337,011,536	81,027,439
Interline ticket passengers	191,633,232	59,923,446
Total number of passengers carried one mile	730,938,606	135,240,530
Number of passengers to and from Boston, including monthly ticket passengers	23,195,267	2,170,600
AVERAGES Freight:		
Miles hauled — revenue freight	154.40	2.89
Tons of revenue freight per train mile	960.68	10.24
Tons of revenue freight per loaded car mile	25.71	.18
Revenue per ton of freight	\$ 2.56395	\$ .28769
Revenue per ton per mile (cents)	1.661	.214
Revenue per revenue train mile	\$ 15.953	\$ 1.902
Freight revenue per loaded car mile (cents)  Passenger:	42.694	5.747
Average distance carried per passenger (miles)	27.77	1.68
Number of passengers per train mile	104.50	18.57
Number of passengers per car mile	24.72	2.72
Revenue per passenger (cents)	57.85	.89
Revenue per passenger mile, monthly commutation ticket passengers (cents)	0.935	.011
Revenue per passenger mile, other commutation ticket	1.817	.075
passengers	2.290	
interline (cents) Revenue per passenger mile, interline passengers (cents)	2.545	.216
Revenue per passenger mile, all passengers (cents)	2.083	.149
Passenger revenue per passenger car mile (cents)	51.482	1.592
Total passenger service train revenue per train mile .	\$ 2.810	\$ .023

Italics indicate decrease

